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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/982,753	10/22/2001	Keith A. Bentley	36488-169993	8711

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EXAMINER

FLEURANTIN, JEAN B

ART UNIT PAPER NUMBER

2172

DATE MAILED: 05/20/2004

9

Please find below and/or attached an Office communication concerning this application or proceeding.

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# Office Action Summary

Application No.

09/982,753

Applicant(s)

BENTLEY ET AL.

Examiner

Jean B Fleurantin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 17-20 and 25-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 21-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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### **DETAILED ACTION**

1. This is response to the application filed on 22 October 2001, in which claims 1-37 are presented for examination.

2. The miscellaneous letter (Paper No. 2) has been entered, and the Declaration filed on 21 November 2001 (Paper No. 3) has been entered.

### ***Drawings***

3. The Examiner accepts the drawings.

### ***Specification***

4. In page 41 of the application, Applicant is advised to delete the underline title on the abstract portion, and the extraneous matter found at the bottom of the page. See MPEP 608.01(f).

### ***Election/Restrictions***

5. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-16 and 21-24 are drawn to a method of managing file-based data which is manipulated by at least one user via a file-based computerized editor, classified in class 707, subclass 200.

II. Claims 17-20, 25-27 and 37 are drawn to a data management structure design data comprising a plurality of components, classified in class 707, subclass 102.

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III. Claims 28-36, are drawn to a client-server system for multi-user management of engineering data, the system comprising: a server including a store for storing a current version of a plurality components, classified in class 707, subclass 203.

The inventions are distinct, each from the other because of the following reasons:

The inventions in Groups I, II and III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instance case, invention Group I has separate utility such as a method of managing file-based data. Invention Group II has separate utility such as a data management structure design data comprising a plurality of components. Group III has separate utility such as a client-server system for multi-user management of engineering data, the system comprising: a server including a store for storing a current version of a plurality components.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II or Group III, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Applicants are reminded that upon the cancellation of claims to a non-elected invention,

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the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors in no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

During a telephone conversation with Mr. James R. Burdett (Reg. No. 31,594) on April 15, 2004 a provisional election was made without traverse to prosecute the invention of a method of managing file-based data which is manipulated by at least one user via a file-based computerized editor, claims 1-16 and 21-24. Affirmation of this election must be made by applicant in replying to this Office Action. Claims 17-20, 25-27, 37 and 28-36 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to an non-election invention.

Applicants are advised that the to this requirement to be complete must include and election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicants are reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one more of the currently named inventors in no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

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*Claim Rejections - 35 USC § 102*

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-16 and 21-24 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent 5,815,415 issued to Bentley et al. (hereinafter “Bentley”).

As per claim 1, Bentley discloses, “a method of managing file-based data which is manipulated by at least one user via a file-based computerized editor” (col. 5, line 65 to col. 6, line 2), “the file-based data including a plurality of file elements” (see col. 47, lines 50-52), the method comprising the steps of:

(a) “representing file-based data as a plurality of individual components, each individual component having a unique identity and identifier” as to maintain a record for each store file,

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and persistent store identifier assigned to the store file, (see col. 45, lines 13-17), and column 37, lines 31-51; and

(b) "storing said individual components in a store" as to maintain a record for each store file, (see col. 45, lines 14-15).

As per claim 2, Bentley discloses, "wherein step (b) further comprises: storing all of said individual components corresponding to one file of said file-based data in a single store, wherein said single store, wherein single store contains no individual components of a different file of said file-based data", (col. 44, lines 41-47).

As per claim 3, Bentley further discloses, "(c) retrieving said components using a client comprising a private store, and a run-time agent, wherein said run-time agent looks up a store's server, connects with said store's server" (see col. 15, lines 62-65), "requests said components from said server, and stores a version of said components in said private store" (see col. 46, lines 7-20).

As per claim 4, Bentley further discloses, "(d) providing access to said retrieved components to external applications through said run-time agent", (see col. 9, line 53 to col. 10, line 20).

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As per claim 5, Bentley further discloses, “(c) recreating equivalent file-based data for use within an environment of a file-based computerized editor from said individual components in said store”, (see col. 5, line 65 to col. 6, line 2).

As per claim 6, Bentley discloses, “wherein said recreated file-based data may be edited via a file-based editor in a plurality of successive sessions, and step (b) includes storing (i) a latest version of the individual components, and (ii) information to fully document changes made to each version of each individual component during each of said plurality of successive sessions, wherein said changes comprise additions, modifications and deletions” (see col. 12, lines 5-16).

As per claim 7, Bentley further discloses, “at least one of: (d) using said information stored in step (b) (ii) to view successive versions of any individual changed component; and (e) using the information stored in step (b) (ii) to view a plurality of changed components”, (see col. 9, lines 20-32).

As per claim 8, Bentley discloses, “wherein step (a) includes defining and storing a schema for said plurality of components, said schema being a set of classes that captures all of the information in said file-based data” as multiple schemas (50) may be stored in a single persistent store (18) and objects (52) defined by a schema (50) are stored in the persistent store (18) with the defining schema (50), (see col. 11, lines 8-11), and see column 7, lines 36-39.



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As per claim 9, Bentley further discloses, “(c) retrieving said schema whenever said components are retrieved from said store”, (see col. 17, lines 12-14).

As per claim 10, Bentley discloses, “wherein said schema defines at least one of a class for each element type, and a plurality of classes for said file-based data”, (see col. 11, lines 12-14).

As per claim 11, Bentley discloses, “wherein said schema is associated with a type of file selected from the group consisting of a DGN file, a DWG file and a STEP file”, (see col. 4, lines 51-55).

As per claim 12, in addition to claim 6, Bentley discloses, “(ii) a set of fields, each field having a data type and a data value, and (iii) a program which interprets and modifies said fields, and step (b) includes storing items (i)-(iii) for each component”, (see col. 11, lines 8-11).

As per claim 13, Bentley discloses, “wherein at least some of said components further have (iv) a list of other dependent components, and step (b) further includes storing said list for such components” as to access may simply be restricted by the way a file system is set up, (see col. 48, lines 32-36).

As per claim 14, Bentley discloses, “wherein at least some of said components further have (iv) an access control value, and step (b) further includes storing said access control values

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for such components” as to access may simply be restricted by the way a file system is set up, (see col. 48, lines 32-36).

As per claim 15, Bentley discloses, “wherein step (a) includes mapping at least some of said plurality of elements to respective single components”, (see col. 9, lines 29-31).

As per claim 16, Bentley further discloses, “(c) defining a tag for at least some of said file elements during interaction with said computerized editor; and (d) storing and saving a mapping between said tag for each tagged file element and its component identifier” as the object descriptor contains a persistence binding tag reference (104) to a persistence binding tag (106) that in turn contains a persistent store reference (108) to the particular persistent store (18), the persistence binding tag (106) also has a tag ID for the object that is unique in the persistent store (18), (see col. 41, lines 59-63).

As per claim 21, in addition to claim 1, Bentley further discloses, “a set of fields, each field having a data type and a data value, and (iii) a program which interprets and modifies said fields” as a const method could modify anything the const object refers to, then programs could easily modify data, (see col. 27, lines 5-10).

As per claim 22, Bentley discloses, “wherein at least some of said individual components further have (iv) a list of other dependent components, said memory further storing such lists”, (see col. 18, lines 24-42).

As per claim 23, Bentley discloses, “wherein at least some of said individual components further have (iv) an access control value, said memory further storing such values” as to access may simply be restricted by the way a file system is set up, (see col. 48, lines 32-36).

As per claim 24, Bentley discloses, “wherein each element is represented by a component”, (see col. 12, lines 50-51).

***Prior Art***

7. The prior art made of record and not relied upon is considered pertinent to applicant’s disclosure.

U.S. Patent No. 5,878,408 issued to Van Huben et al.

U.S. Patent No. 5,884,322 issued to Sidhu et al.

U.S. Patent No. 5,987,242 issued to Bentley et al.

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### CONTACT INFORMATION

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B Fleurantin whose telephone number is 703-308-6718.


The examiner can normally be reached on 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John B Breene can be reached on 703-305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jean Bolte Fleurantin

May 14, 2004

  
SHAHID ALAM  
PRIMARY EXAMINER